

CLAIMS:

1. A method for producing tissue cells, the method comprising the steps of:

obtaining pluripotent stem cells by selectively culturing iris pigmented epithelial cells by a floated coagulated mass culturing technique, the iris pigmented epithelial cells being isolated from an eyeball of an animal; and

obtaining tissue cells from the pluripotent stem cells by culturing the pluripotent stem cells.

2. The method according to Claim 1, wherein the animal is a chicken, a mouse, a rat, or a human.

3. The method according to Claim 1 or 2, wherein the animal is a postnatal individual animal.

4. The method according to any one of Claims 1 to 3, wherein the pluripotent stem cells are Oct-3/4 positive and/or tridermic differentiable.

5. The method according to any one of Claims 1 to 4, wherein the isolating of the iris pigmented epithelial cells includes:

an iris-tissue-extirpating step of extirpating iris tissue from the eyeball of the animal; and

an iris-pigmented-epithelial-cell-separating step of separating iris pigmented epithelium from the iris tissue thus extirpated.

6. The method according to Claim 5, wherein the iris-tissue-extirpating step includes:

an iris-tissue-excising stage of excising only iris tissue

from the eyeball of the animal;

an enzyme treatment stage of subjecting the excised iris tissue to enzyme treatment; and

an iris-tissue-restoring stage of restoring the enzyme-treated iris tissue.

7. The method according to any one of Claims 1 to 6, wherein, in the step of obtaining the tissue cells from the pluripotent stem cells, the pluripotent stem cells are differentiated into one or more types of tissue cells by culturing the pluripotent stem cells under differentiation inducing condition.

8. The method according to Claim 7, wherein the culturing under the differentiation inducing condition is conducted with serum.

9. The method according to Claim 8, wherein the serum is fetal calf serum or avian serum.

10. The method according to Claim 8 or 9, wherein, in the culturing under the differentiation inducing condition, a growth factor is further used.

11. The method according to Claim 10, wherein the growth factor is EGF or FGF.

12. Tissue cells obtained by a method according to any one of Claims 1 to 11.

13. The tissue cells according to Claim 12, wherein the tissue cells are ectodermal cells or cells derived from ectoderm,

- 26 -

mesodermal cells or cells derived from mesoderm, or endodermal cells or cells derived from endoderm.

14. The tissue cells according to Claim 12 or 13, wherein the tissue cells forms tissue forming an intravital organ.